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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,206	02/09/2001	Michael Fritz	RDID0028US	5556
20306	7590	08/30/2004	EXAMINER	
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 S. WACKER DRIVE 32ND FLOOR CHICAGO, IL 60606			CHUNDURU, SURYAPRABHA	
			ART UNIT	PAPER NUMBER
			1637	

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/780,206	Applicant(s) FRITZ ET AL.	
	Examiner Suryaprabha Chunduru	Art Unit 1637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-41 and 68-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/21/03 + 4/23/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicants' response to the office action filed on May 11 2004 has been entered.
2. The IDS filed on December 29, 2003 and the Supplemental IDS filed on April 28, 2004 have been entered.
3. Claims 1-35, 42-67 are cancelled. Claims 36-41, 68-76 are pending.

New Grounds of rejection

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 69, 72-76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 69 and 72 are indefinite over the recitation of "capable of transporting / capable of binding" because capability is a latent characteristic and the claims do not set forth the criteria by which to determine capability. The meets and bounds of the claims are unclear. That is, it is not clear whether the recited transport mechanism have the potential to transport the sample or do in fact transport the sample and it is not clear whether the recited surface has potential to bind nucleic acids or do in fact bind nucleic acids. Amendment of the claim to read, for example, "which transports / which binds" would obviate this rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 36-41, 68-76 are rejected under 35 U.S.C. 102(b) as being anticipated by Zaun et al. (USPN. 5,415,839).

Zaun et al. teach an apparatus of claim 36, 72, for detecting nucleic acids in a sample comprising

(a) a binding space for binding test sample comprising nucleic acids (see (microparticle beads in the bottom of the reaction chamber (see col. 8, line 20-32);

(b) an amplification space (reaction space), wherein at least a part of the amplification space is identical to a part of the binding space (see col. 7, line 31-50, col. 8, line 6-32);

(c) a detection space for detecting the nucleic acids (see col. 8, line 33-41).

With regard to claim 37, 73, Zaun et al. teach that the apparatus comprises reagents for purifying (reagents for test sample), amplifying (amplification reagents) (see col. 7, line 17-26, 53-57);

With regard to claim 38, Zaun et al. teach that the detection space comprises a part of at least one of the amplification space (open end of the reaction chamber connects to the detection chamber, indicating that the detection chamber comprises a part of the a reaction chamber) and a binding space (see col. 8, line 34-41, col. 9, line 40-67);

With regard to claim 39, 74, Zaun et al. teach that the binding space and the amplification space comprises a capillary space (see col. 9, line 40, 67, col. 8, line 1-32);

With regard to claim 41, 76, Zaun et al. also teach that the capillary space is a glass or polystyrene (see col. 8, line 21-32, col. 9, line 49-67);

With regard to claim 69, Zaun et al. teach that the apparatus further comprises a transport mechanism to transport the sample and reagents through the said spaces (see col. 7, lines 8, line 42-59, col. 8, line 49-57);

With regard to claims 70-71, Zaun et al. teach that the binding space comprises an inner surface for binding nucleic acids (see col. 8, lines 20-32);

With regard to claims 40, 68, 75, Zaun et al. teach that the capillary reaction vessel is surrounded by heatable metal layer (heat conducting material surrounding each reaction chamber as a ring) (see col. 12, line 5-40).

Thus the disclosure of Zaun et al. meets the limitations in the instant claims.

Response to arguments

6. Applicants' arguments to the office action are fully considered and found persuasive in part.
7. With regard to the IDS, Applicants' arguments are fully considered and the IDSs have been entered and considered.
8. With regard to the translation of the German language priority document, Applicants' arguments have been fully considered. Examiner reiterates that the instant application would not get the foreign priority date based on the non-submission of the translation to the German document and any intervening art would be applicable.
9. With regard to the rejection made in the previous office action under 35 USC 102(e), Applicants' arguments are fully considered and the rejection is withdrawn in view of the arguments.

Conclusion


No claims are allowable.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suryaprabha Chunduru whose telephone number is 571-272-0783. The examiner can normally be reached on 8.30A.M. - 4.30P.M, Mon - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 571-272-0782 . The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and - for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.


Suryaprabha Chunduru
August 24, 2004


JEHANNE SITTON
PRIMARY EXAMINER